

Orange-footed Scrubfowl in Darwin – horticultural pest or partner?

Matt Gillis¹ and Richard Noske²

¹Parks and Wildlife Commission of the Northern Territory,
PO Box 496, Palmerston, NT 0831.

Email: matthew.gillis@nt.gov.au

²School of Science and Primary Industries, Charles Darwin
University, Darwin, NT 0909.

Unique among Australian capital cities, Darwin (12°27'S, 130°50'E), Northern Territory, lacks feral populations of non-indigenous bird species, apart from occasional outbreaks of Feral Pigeons *Columba livia*. With 68 species confirmed as breeding within the metropolitan area, and at least 12 others likely to do so (R. Noske, unpubl. data), the birdlife of Darwin owes its richness to the retention of corridors of diverse natural habitats, as well as the small size (112 km²) of the city, with few suburbs far from protected or undeveloped areas on its coastal or inland fringe. While many bird species of mangals (mangrove communities) have specialised habitat requirements that preclude their colonisation of urban areas, all of the local frugivores typical of rainforest (e.g. Pied Imperial-Pigeon *Ducula bicolor* and Figbird *Sphecotheres viridis*) are attracted to the abundant fruit-bearing trees in well-watered suburban gardens and parks. Perhaps the most recent colonist from rainforests is the Orange-footed Scrubfowl *Megapodius reinwardt*, which, like its better-studied larger cousin in eastern Australia, the Australian Brush-turkey *Alectura lathami*, builds large mounds to incubate its eggs.

In the early 1980s, populations of Scrubfowl were known from only three areas of Darwin (Thompson & Goodfellow 1987). During their 1998 survey, however, Franklin and Baker (2005) documented 82 records of the species from 23 of the 30 named suburbs in Darwin, and noted records of mounds. They also reported that the Wildlife Rescue Unit of the Parks and Wildlife Commission of the Northern Territory received many complaints from the public about the garden-raking activities of Scrubfowl. This paper summarises the results of a telephone survey conducted in 2002, designed to ascertain public attitudes towards the species, as well as any obvious change in their local distribution. Information was gained through the use of the media. An article was printed in local newspapers (*Northern Territory News* and *Sunday Territorian*) on the weekend of 7-8 September 2002, and MG had two consecutive radio interviews inviting people to respond by phone if they had seen the Scrubfowl in their backyards. Respondents were asked to provide information pertaining to the

number of birds and mounds in their area of residence, number and type of pets, and their attitude towards, and relationship with, the species.

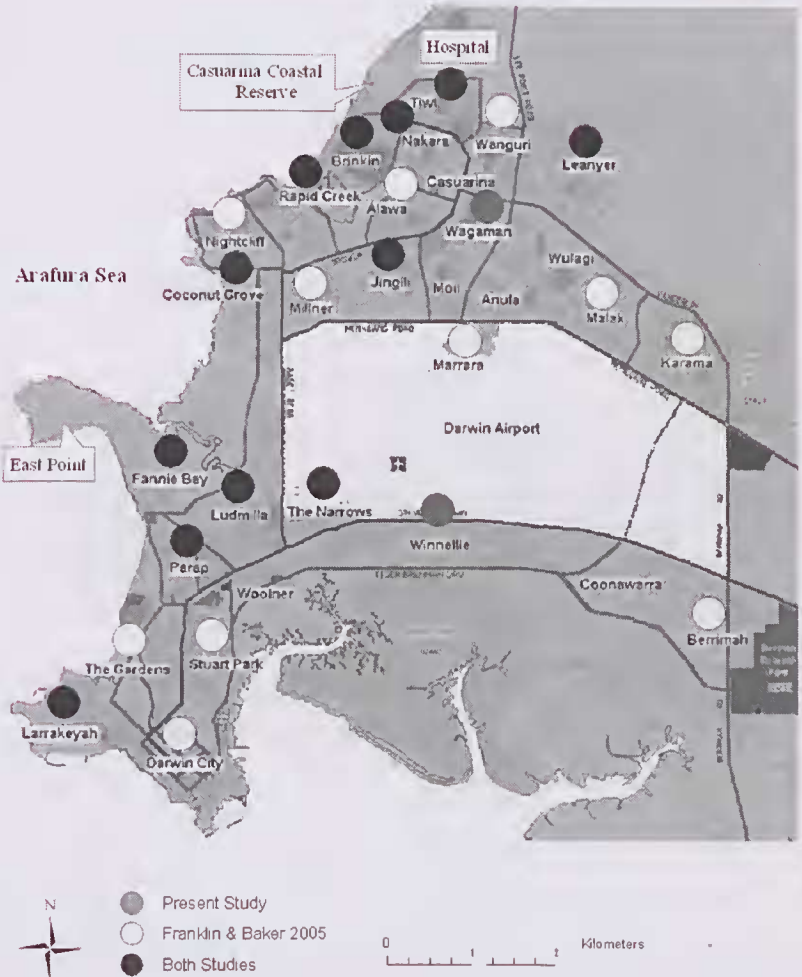


Figure 1. Map of Darwin area, showing locations of Scrubfowl from Franklin and Baker (2005) and the present study.

From 50 phone calls, 84 records of birds were obtained, including 62 records from 14 Darwin suburbs (Figure 1), two from Palmerston, and 20 from six rural areas: Knuckkeys Lagoon, Howard Springs, Humpty Doo, Noonamah, McMinns Lagoon and Virginia. Of the 62 records for Darwin suburbs, 32% were from the coastal suburbs of Rapid Creek and Fannie Bay (Figure 2). This contrasts somewhat with the findings of Franklin & Baker (2005), in which the latter two suburbs constituted only 11% of records ($n = 82$), while the highest-scoring suburb, with 27% of records, was Millner (27%). We also received reports from two suburbs (Wagaman and Winnellie) for which Franklin and Baker (2005) had no records. However, whilst the present survey yielded only four suburbs with mounds, Franklin and Baker (2005) reported mounds in eight suburbs.

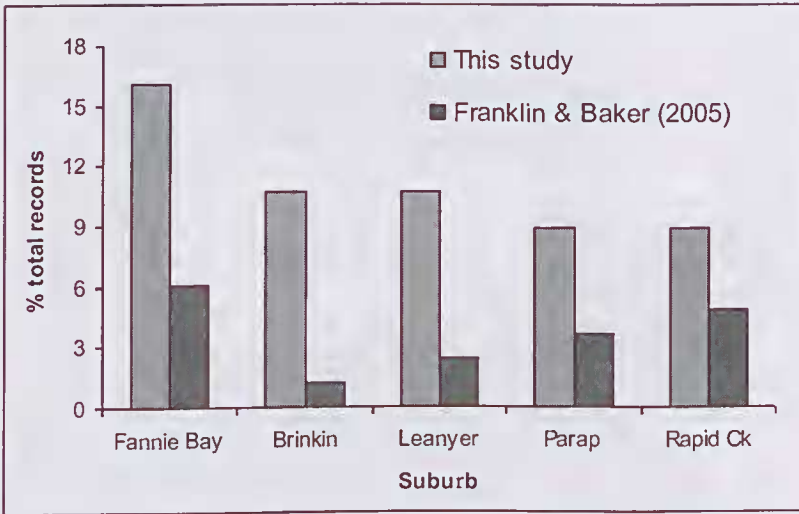


Figure 2. Darwin suburbs where records of Scrubfowl exceeded five during the present survey.

All 50 respondents indicated that they were content with the Scrubfowl visiting their yards and rural blocks. Many residents did not begrudge re-raking the mulch, and some had changed their gardening practices by allowing for disturbance to particular areas of their garden whilst protecting other areas with wire mesh. Indeed several respondents expressed positive attitudes towards Scrubfowl, suggesting that they were helpful in (1) cleaning out gutters, (2) eating termites and cockroaches in the garden, and (3) aerating the soil in gardens by turning over the litter and soil surface. Of the ten respondents who kept pets, two had allegedly trained them to ignore the birds.

Three respondents reported dogs injuring or killing juvenile Scrubfowl, suggesting that pets pose a threat to dispersing juveniles. Dogs or foxes killed up to 15% of dispersing Australian brush-turkey chicks near Brisbane (Göth & Vogel 2003).

Reporting of the Scrubfowl in this survey was undoubtedly biased towards members of the public that read the local newspaper, and listen to local radio. This survey is not directly comparable with that of Franklin and Baker (2005) as they used numerous personal observations and records from amateur and professional naturalists, as well as two interviews on local radio stations. Nevertheless the reporting rates from each suburb differ sufficiently to indicate that there may have been some changes in the distribution and abundance of urban Scrubfowl over the four years between surveys. In particular, populations in the suburbs of Fannie Bay and Rapid Creek may have increased, possibly due to their proximity to the monsoon rainforest in East Point Reserve and a major riparian corridor, respectively. On the other hand, the paucity of records of mounds – even fewer than reported by Franklin and Baker (2005) – suggests that the number of breeders within the suburbs has not increased. These trends support the contention of the above authors that the suburbs act mainly as population ‘sinks’ for excess young from nearby monsoon rainforests.

The total absence of complaints during the present survey may signal a gradual change in public attitudes towards Scrubfowl. Since the 1980s, residents have complained about Scrubfowl to the Parks and Wildlife Service, especially during the mound building season of September-April (Palmer *et al.* 2000). Householders’ complaints concerned the destruction of landscaping and plantings, creation of debris, harassment of pets and loud, early morning calling by Scrubfowl. In contrast, during the present survey some respondents admitted to actively encouraging Scrubfowl by feeding them with food scraps and chicken pellets. A similar variation in attitude towards the Australian Brush-turkey was found in Brisbane suburbs (Jones & Everding 1991, Jones *et al.* 1993).

The participation of the public in wildlife surveys indicates some sympathy for wildlife among suburban householders. Nevertheless conflict between humans and Scrubfowl seems likely in the future and we suggest that such conflict can be ameliorated through (1) education programs designed to increase public awareness of the peculiar breeding biology of the bird; and (2) changes in gardening practices, such as the use of coarse or heavy mulch, placing of rocks or logs around new plants, and the covering of seedlings with wire mesh.

Acknowledgements

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At home in suburbia: the Orange-footed Scrubfowl *Megapodius reinwardt*. (Heather Ryan)